REMARKS

Claims 24-26, 28-37, 79-82, 85-95, 97, 99-103, 105, 107-110, 112-118, 120, 122-124, 127-135, 137, 139 and 140 were examined in the outstanding office action mailed on 04/06/2007 (hereafter "Outstanding Office Action"). All the claims were rejected.

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By virtue of this paper, claims 24, 28, 31, 79-81, 99, 110, 112, 122-124 and 135 are sought to be amended, and claims 97, 105, 120 and 137 are sought to be canceled. The amendments and cancellations are believed not to introduce new matter and their entry is respectfully requested. Claims 24-26, 28-37, 79-82, 85-95, 99-103, 107-110, 112-118, 122-

10   124, 127-135, 139 and 140 are thus respectfully presented for consideration further in view of the below remarks.

Claim Rejections - 35 U.S.C. § 112, Second Paragraph

Claims 28-29, 31-37, 79, 80-82, 85-95, 97, 99-103, 105, 107-109, 112-113, 115-117,

15   118, 122-124, and 127-140 were rejected under 35 U.S.C. 112, second paragraph, allegedly as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 28, 81, 112 and 124, it was stated:

20   ... what is meant by "wherein said second information element comprises a
        non-mandatory information element according to a specification" ? First how can one
        tell the metes and bounds of the claim if one does not know which specification?
        Secondly applicant's specification never clearly defines what the difference between
        the second information element are compared to the specification.
25   (Lines 9-13 on page 2 of the Outstanding Office Action)

In response each of the claims is sought to be amended to recite that the specification is "used for signaling in said ATM network". Thus the recited specification is a signaling specification for ATM networks. In addition, the specification is one which provides for the

30   claimed non-mandatory information elements.

Therefore, one skilled in the relevant skilled in the relevant arts would be able to identify which specifications are covered by claim 28, 81, 112 and 123, and which

specifications are not.

        With respect to the differences between the second information element and the

specification, it is noted that UNI and NNI are example specifications used for signaling for

5   ATM devices. Non-mandatory elements (corresponding to the claimed 'second information

element') are permitted in these specifications. See, for example, reference to "UNI 3.1/4.0

specification" on page 14 line 1, and line 13 of page 13 through line 14 on page 16 of the

specification of the subject patent application, which detail the role of the UNI/NNI (and their

extensions in embodiments of the present invention) specifications in setting up the virtual

10   circuits according to various aspects of the present invention.

        Withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, with respect

to claims 28, 81, 112 and 124 is respectfully requested.

15   With respect to claims 29, 82 and 113 it was stated:

                ... ; what is meant by "wherein said specification comprises one of a user to
        network interface (UNI) or network to network interface (NNI) ? How can one tell
        the metes and bounds of the claim if one does not know what the difference between
        the second information element are compared to the UNI or NNI specification? Is
20   applicant trying to say that the UNI and NNI only specifies setting up a single virtual
        circuit versus a bundled plurality of virtual circuits at a time?
        (Lines 14-19 on page 2 of the Outstanding Office Action)

        As noted above, UNI and NNI are example signal specifications, which are extended

25   (e.g., by including non-mandatory information elements) to provide some of the features of

the present invention.

        Accordingly, UNI and NNI according to claims 29, 82 and 113 are comprised in the

specification recited in the respective base claims.

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        Withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, with respect

to claims 29, 82 and 113 is respectfully requested.

        With respect to claim 31, it was stated that:

Referring to claim 31, what is meant by "immediately provision fewer than said plurality of virtual circuits"? Are circuits provisioned when they are set up in the table or when traffic is running over the circuits?

What is meant by "not-as yet provisioned circuits" ? "not-as yet provisioned circuits is confusing to the reader of the claim language. Applicant specification teaches that the a plurality of virtual circuits are requested, the total is Acknowledged and setup stored in a table, and second type requests are made to use the circuits setup in the tables and an second type of acknowledgment is received, "not-as yet provisioned" is confusing to the reader and therefore indefinite (Lines 20-28 of page 2 of the Outstanding Office Action)

It is first noted that claim 31 is sought to be amended to depend from claim 24.

Currently amended claim 31 is explained with an example merely for Examiner's understanding. Assume that in claim 24 "plurality of virtual circuits" equals 100 (meaning 100 virtual circuits are sought to be setup using a single signaling setup message and all the 100 virtual circuits are accepted for setup). The ATM network may immediately provision only 60 (fewer than said plurality of virtual circuits) virtual circuits, and the remaining 40 virtual circuits are termed as 'not-yet-provisioned virtual circuit' (see lines 10-11 of page 4 of the specification of the instant patent application).

Activation messages may then be sent to complete provisioning of individual not-yet-provisioned virtual circuits.

In view of the queries posed by the Examiner, the Examiner's attention is directed to element 260 of Figure 2 and element 370 of Figure 3, which indicates that each of the not-yet-provisioned virtual circuits can potentially be activated (to complete provisioning) individually.

Traffic is transferred on a virtual circuit only after provisioning is complete.

Withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, with respect to claim 31 is respectfully requested.

Withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, with respect

to claims 79, 95, 99, 107, 115, 118, 122, 135 and 139 is respectfully requested for similar

reasons.

Claims 97, 105, and 137 were also rejected under 35 U.S.C. § 112, second paragraph.

5   But the rejections are rendered moot in view of cancellation of these claims.

All the rejections under 35 U.S.C. § 112, second paragraph, are thus believed to be

overcome.

10   ***Claim Rejections - 35 U.S.C. § 112, First Paragraph***

Claims 24-26, 28-37, 80-82, 110, 112-117, & 123-124 were rejected under 35 U.S.C.

112, first paragraph, allegedly as failing to comply with the enablement requirement.

With respect to claim 24, it was stated that:

15   ... what is meant by "receiving on said ATM network an acceptance message
indicating that only said single virtual circuit is possible to be provisioned if any of
a plurality of switches in connection path between said first end system and said
second end system is designed not to support said plurality of virtual circuits"? Where
in the specification is it taught that a switch which not designed to support a plurality
20   of virtual circuits communicates with a switch which is able to communicate and
creates the acceptance message?
(Lines 14-19 on page 4 of the Outstanding Office Action)

In response, claim 24 is sought to be amended to recite, "... if any of a plurality of

25   switches in a connection path between said first end system and said second end system is

designed not to support ***setting up of*** said plurality of virtual circuits ***in response to said***

single signaling message". (***Emphasis Added***)

The requisite support is believed to be present at least for the claims as sought to be

30   amended. The Examiner's attention is directed to mandatory and non-mandatory elements

in the message format described in lines 6 page 14 through line 16 of page 7, in addition to

the below text of the specification of the subject patent application:

Another aspect of the present invention allows network to be operational even
in the presence of devices which do not support the set up of groups of virtual circuits.
35   To facilitate such a feature, an embodiment (implemented using UNI/NNI protocols)

incorporates ***non-mandatory (which can be ignored) information elements to transmit the group related information. Another information element which requests set up of a single virtual circuit is also contained in the set up messages***.

5   As a result, a device which does not support groups merely ignores the information element related to groups, but ***processes the information element related to a single virtual circuit and sends acceptance for the single virtual circuit***. In other words, a single virtual circuit may be set up when all the devices in the path do not support the set up of a group of virtual circuits.
(Lines 2-10 on page 5 of the specification, ***Emphasis Added***)

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         In case any of the devices in the virtual circuit path do not support group of virtual circuits, the corresponding device may ***ignore the new information element (as being non-mandatory) and accept a single virtual circuit corresponding to the conventional information element***. Accordingly, ***a response message*** (propagated
15   back to edge router 120) would indicate that ***only one virtual circuit has been accepted***.
(Lines 6-10 on page 17 of the specification, ***Emphasis Added***)

It is believed that at least the above noted description, at least in combination with the

20   motivation and context set by the rest of the application as filed, provides the requisite

enabling disclosure. Withdrawal of the rejection under 35 U.S.C. § 112, first paragraph,

with respect to claim 24 is respectfully requested.

Claims 80, 110 and 123 have also been rejected under 35 U.S.C. § 112, first

25   paragraph, for reasons substantially similar to those stated above with respect to claim 24.

Claim 80 is also sought to be at least substantially as claim 24 and withdrawal of the rejection

is respectfully requested.

With respect to claim 99 it was stated that:

30   ..., what is meant by "receiving a second signaling message requesting activation of at least one of said not-yet-provisioned virtual circuits comprises in said plurality of virtual circuits"? Where in the specification is it taught that a switch which not designed to support a plurality of virtual circuits communicates with a switch which is able to communicate and creates the acceptance message?
35   (Lines 26-30 on page 4 of the Outstanding Office Action)

The recited second signaling message is supported at least by elements 260 of Figure

2 (and related description on lines 11-12 on page 10 of the specification of the subject patent

application), message construction block 520 of Figure 5 (and related description on lines 14-

19 of page 23 of the specification), and claim 20 as filed (which is part of the specification under the applicable law/practice).

5   Withdrawal of the rejection under 35 U.S.C. § 112, first paragraph, with respect to claim 99 is accordingly respectfully requested.

All the rejections under 35 U.S.C. § 112, first paragraph, are thus believed to be overcome.

Claim Rejections - 35 U.S.C. § 101

10   Claims 24-26, 28-37, 79-82, 85-95, 97, 94-103, 105, 107-118, 120, 122-124, 127-135, 137, and 139-140 were rejected under 35 U.S.C. 101 allegedly as being directed to non-statutory subject matter.

15   The Examiner further suggested that "... the proper format for software in order to be statutory is : A computer readable medium stores the instructions which are executable on a computer which perform the following steps." (Last 3 lines on page 5 of the Outstanding Office Action).

20   Each of independent claims 122 and 135 have been amended to recite, "... A computer readable medium storing one or more sequences of instructions" consistent with the suggestion of the Examiner. Withdrawal of the rejection under 35 U.S.C. § 101, with respect to currently amended independent claims 122 and 135 is respectfully requested.

25   Claims 123-124 and 127-134 constitute patentable subject matter, at least as depending from base claim 122. Claims 137 and 139-140 constitute patentable subject matter, at least as depending from base claim 135.

However, it is unclear the specific basis for rejecting claims 24-26, 28-37, 79-82,
30   85-95, 97, 94-103, 105, 107-118, and 120 under 35 U.S.C. § 101. The Examiner is respectfully requested to quote specific sections of MPEP, case law, or document entitled,

"Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility", as appropriate in rejecting each of the claims, or withdraw the rejections under 35 U.S.C. § 101.

5   ***Claim Rejections Under 35 U.S.C. § 102***

Claims 24, 30-35, 79-80, 85-91, 95, 97, 99-103, 105, 107-110, 114-118, 120, 122-123, 127-131, 135, 137,139 and 140 are rejected under 35 U.S.C. 102(e) as being anticipated by Gupta (U.S. Patent No.: 6,278,714). The claims, at least as amended, are believed to be allowable over Gupta.

10

Currently amended independent claim 24 recites, among other features, "a first signaling message requesting said plurality of virtual circuits to be set up,... wherein said first signaling message is a single signaling message... an acceptance message indicating that only said single virtual circuit is possible to be provisioned if any of a plurality of switches 15 in a connection path between said first end system and said second end system is designed not to support setting up of said plurality of virtual circuits in response to said single signaling message".

The Examiner relied upon the below portion of Gupta in rejecting a portion of the 20 above quoted language of claim 24:

> FIG. 4 is a flow chart of a process used at a node in setting up a virtual circuit from an originating station U1 to a destination station U2. ***This process describes a simple single VC connection between U1 and U2***. When ***a connection request*** is received on an incoming port i, such as from a user or a predecessor node, it is routed 25 to the controller as discussed previously (400). The controller consults a network map and determines the (best) next node for routing data from U1 toward its destination address (410)...
> (Lines 1-8, Col. 7 of Gupta, ***Emphasis Added***)

30   Thus the portion relied upon by the Examiner is related to a simple single VC connection and the connection request there also is believed to be for one such simple single VC.

In sharp contrast, the amended independent claim 24 recites acceptance of a single

virtual circuit in response to a single signaling message requesting plurality of virtual circuits to be setup.

5   Accordingly, it is contended that Gupta does not disclose or reasonably suggest at least the above noted feature of currently amended claim 24.

Claims 25-26 and 28-37 depend from claim 24, and are thus allowable at least for the reasons noted above with respect to claim 24.

10   It is now asserted currently amended claim 79 is allowable over Gupta. Currently amended claim 79 recites, among other features, "... a plurality of virtual circuits between a first asynchronous transfer mode (ATM) switch and a second ATM switch... sending a second signaling message to complete provisioning of at least one of a plurality of not-yet-provisioned virtual circuits comprised in said plurality of virtual circuits."

15

Thus, in accordance with claim 79, the second signaling message are sent to complete provisioning of one or more of the not-yet-provisioned virtual circuit, which are between the two recited ATM switches.

20   In sharp contrast, the description associated with Figure 17 in line 57 Col. 12 through line 16 Col. 13 of Gupta is directed to using an already provisioned virtual circuit in a virtual circuit bunch to provide connection to a user U1 of Figure 2 of Gupta. In other words, an already provisioned connection is used to provide connection to a user requesting connection from an ATM network.

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Accordingly, it is asserted that currently amended claim 79 is allowable over Gupta. Currently amended claim 122 is also allowable over Gupta at least for some of similar reasons.

30   Claims 78-82, and 85-94 depend from claim 79 and are allowable at least for reasons noted above with respect to claim 79. Claims 123-124 and 127-134 depend from claim122

and are also allowable for similar reasons.

With respect to claim 95, Applicants respectfully traverse. Previously presented claim 95 recites, among other features, ".. sending an acceptance message if said plurality of virtual circuits can be set up between said device and said second ATM switch in response to said single signaling request alone; and provisioning fewer than said plurality of virtual circuits to said second ATM switch..."

Thus, a method according to amended claim 95 sends an acceptance message if all the virtual circuits requested to be set up in a single signaling message can be set up, but provisions fewer than the requested number of virtual circuits. In other words, some number of virtual circuits are not provisioned, though requested in the single signaling request.

The Examiner wrongly equates "no traffic" state of virtual circuits of Gupta to the claimed situation of not provisioning some number of the virtual circuits requested in the single signaling request.

It is Applicant's position that such equating is erroneous since provisioning implies that the virtual circuits are ready for transporting packets, irrespective of whether packets are transported or not.

Accordingly, previously presented independent claim 95 is allowable over Gupta. Previously presented independent claims 118 and 135 are also allowable over Gupta at least for similar reasons.

Claims 99-102 depend from claim 95 and are thus allowable at least for the reasons noted above with respect to claim 95. Claims 139 and 140 depend from claim 135 and are allowable at least for the reasons noted above with respect to claim 135.

Currently amended claim 99 is independently allowable over Gupta in reciting that, "... completing provisioning of said at least one of said not-yet-provisioned virtual circuits

in response to receiving said second *signaling* message..." (***Emphasis Added***).

Previously presented independent claim 103 recites, among other features, "... for provisioning fewer than said plurality of virtual circuits to said second ATM switch." and is

5   allowable over Gupta for at least the reasons noted above with respect to claim 95.

Claims 107-109 depend from claim 103 and are thus allowable at least for the reasons noted above with respect to claim 103/95.

10   Currently amended claim 110 recites, among other features, "... a single signaling message requesting said plurality of virtual circuits to be set up... receiving an acceptance message indicating that only said single virtual circuit is possible to be provisioned if any of a plurality of switches in a connection path between said first ATM switch and said second ATM switch is designed not to support set up of said plurality of virtual circuits in response

15   to said single signaling message" and is thus allowable over Gupta for at least some of the reasons noted above with respect to claim 24.

Claims 112 - 117 depend from claim 110 and are thus allowable at least for the reasons noted above with respect to claim 110.

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Thus all the objections and rejections are believed to be overcome and the application is believed to be in condition for allowance. The Examiner is invited to telephone the undersigned representative at 707.356.4172 if it is believed that an interview might be useful for any reason.

Respectfully submitted,

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